

Giovanni News



NASA Goddard Earth Sciences Data and Information Services Center (GES DISC)

From the Editor:

Hello! You may immediately notice that this issue of *The Giovanni News* looks (and perhaps feels) different from previous issues. That is due to the fact that Wainie Youn, who assisted in the editing and formatting of the newsletter, has taken a new job with the Autism Society of America. I will miss her ability to create a dynamic look and flow to the newsletter each month, leaving me to the more antiquated methods that I use.

This issue contains the full agenda and schedule for the 2nd Gregory G. Leptoukh Online Giovanni Workshop. In addition, a new and improving feature of Giovanni-4 is highlighted. This issue is short as we are preparing for the workshop – next month's issue, to follow shortly, will highlight Giovanni-4 development status.

Regards,
Jim Acker

Table of Contents

- Noteworthy publications from July and August 2014
- Agenda – The 2nd Gregory G. Leptoukh Online Giovanni Workshop
- Smoothed & Unsmoothed

Noteworthy publications from July and August 2014

The following scientific papers appeared online in July and August 2014. Each paper used Giovanni in the performance of the research or in the presentation of the results.

Evan, A.T., Flamant, C., Fiedler, S., and Doherty, O. (2014) An analysis of aeolian dust in climate models. *Geophysical Research Letters*, **41**, 6 pages, doi:10.1002/2014GL060545.

Gregg, W.W., and Rousseaux, C.S. (2014) Decadal trends in global pelagic ocean chlorophyll: A new assessment integrating multiple satellites, in situ data, and models. *Journal of Geophysical Research: Oceans*, **published online September 11, 2014**, 13 pages, doi:10.1002/2014JC010158.

Liu, Z. (2014) Comparison of precipitation estimates between Version 7 3-hourly TRMM Multi-Satellite Precipitation Analysis (TMPA) near-real-time and research products, *Atmospheric Research*, **153**, 119-133, doi:10.1016/j.atmosres.2014.07.032

ul-Haq, Z., Tariq, S., Ali, M., Mahmood, K., Batool, S.A., and Rana, A.D. (2014) A study of tropospheric NO₂ variability over Pakistan using OMI data. *Atmospheric Pollution Research*, **5**, 12 pages, doi:10.5094/APR.2014.080.



Agenda – The 2nd Gregory G. Leptoukh Online Giovanni Workshop

Day 1: November 10, 2014

(Times are given for U.S. Eastern Standard Time and Universal Time, as EDT/UTC.)

09:00/14:00

Opening Remarks: Greetings, Acknowledgments

09:30/14:30

Current Status – Data portals, data sets, analytical functions, and visualizations

10:00/15:00

Status of Giovanni-4 – Chris Lynnes, NASA GES DISC

11:00/16:00

Research Highlights and Connecting with the Giovanni Community

11:30 – 13:00 / 16:30 – 18:00

Break

13:00-14:00 / 18:00 – 19:00

Cecile Rousseaux - Decadal Trends in Global Pelagic Ocean Chlorophyll: A New Assessment Combining Multiple Satellites, In Situ Data, and Models

14:00-15:00/19:00-20:00

Gregory Jenkins - The use of Giovanni in examining air quality in West Africa associated with summer and winter season Saharan dust events

15:00-16:00/20:00 – 21:00

Ramesh Singh - NASA GIOVANNI TOOL – A Unique Tool to Understand Land-Ocean-Atmospheric Coupling Associated with Natural Hazards

End of Day 1

Day 2: November 12, 2014

09:00 – 10:00 / 14:00 – 15:00

Pavel Kishcha - Meridional distribution of aerosol optical thickness and cloud fraction over the tropical Atlantic Ocean

10:00-11:00 / 15:00 – 16:00

Adnan Al-Azri - Mesoscale and Nutrient Conditions Associated with the Massive 2008 *Cochlodinium polykrikoides* Bloom in the Sea of Oman/Arabian Gulf

11:00 – 12:00 / 16:00 – 17:00

John Lehrter - Use of Satellite Remote Sensing to Improve Coastal Hypoxia Prediction

12:00 - 14:00 / 17:00 – 19:00

Break

14:00 – 15:00 / 19:00 – 20:00

Bumjun Kil - Evidence That an Optical Tail in the Gulf of Mexico After Tropical Cyclone Isaac was the Result of Offshore Advection of Coastal Water

15:00-16:00 / 20:00-21:00

Yoana Voynova - Wind to zooplankton: Ecosystem-wide influence of seasonal wind-driven upwelling in and around the Delaware Bay

End of Day 2

Day 3: November 13, 2014

10:00 – 11:00 / 15:00 – 16:00

Michael Taylor – How a synergy of GOCART, MODIS, and AERONET data can be used to train neural networks for producing global aerosol volume size distributions from space

11:00 – 12:00 / 16:00-17:00

Shovonlal Roy - Phytoplankton dynamics and time-varying ecosystem indicators using NASA-Giovanni data

12:00 – 14:00 / 17:00 – 19:00

Break

14:00 – 15:00 / 19:00 – 20:00

Yangyang Xu - The radiative forcing of carbonaceous aerosols over California based on satellite and ground observations

15:00 – 16:00 / 20:00 – 21:00

James Acker - Characterization of Environmental Factors Before and During the Lake Erie Toxic Phytoplankton Bloom in August 2014

End of Day 3

Day 4: Global Poster Session

Poster Titles and Authors

Critical phenomena of rainfall in Ecuador

Sheila Serrano-Vicenti, Nicolás Vásquez, Pablo Jácome, and Leonardo Basile

Impact of satellite rainfall assimilation on Weather Research and Forecasting model predictions over the Indian region

Prashant Kumar, C. M. Kishtawal, and P. K. Pal

Assessment of regional climatic changes in the Eastern Himalayan region: a study using multi-satellite remote sensing data sets

Anubha Agrawal

Long-term memory of atmospheric aerosols over India

B. Abish

Application of Giovanni for classifying weather types associated with aerosol episodes over Indo-Gangetic Plains, India

Dimitris Kaskaoutis

Chlorophyll concentrations in response to monsoonal changes: West Coast of Luzon, Phillippines

Karl Szekiolda

Spatial and temporal variability of ozone and nitrogen dioxide over a major urban estuarine ecosystem

Maria Tzortziou, Jay R. Herman, Alexander Cede, Christopher P. Loughner, Nader Abuhassan, and Sheenali Naik

Seasonal Influenza's Association with Specific Humidity in Three Tropical Central American Countries: Honduras, Nicaragua and Costa Rica

Radina Soebiyanto

Iron-fertilisation by Antarctic krill enhances the South Georgia phytoplankton bloom

Katrin Schmidt, Angus Atkinson, Christian Schlosser, Sophie Fielding, Hugh Venables, Eric Achterberg

Spatio-Temporal Analysis of Nigeria's Surface Aerosol data via GIOVANNI

Julius Akinyoola

Blocking anticyclone over European Russia in the summer of 2010: interplay between atmospheric dynamics and composition

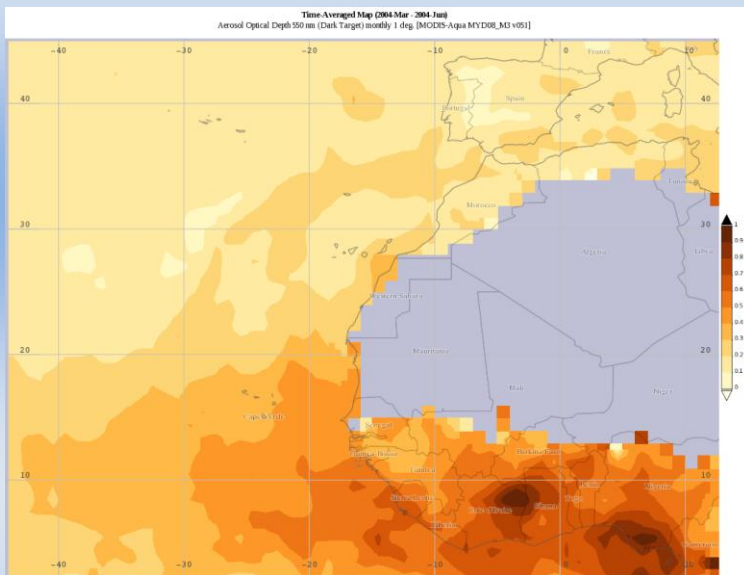
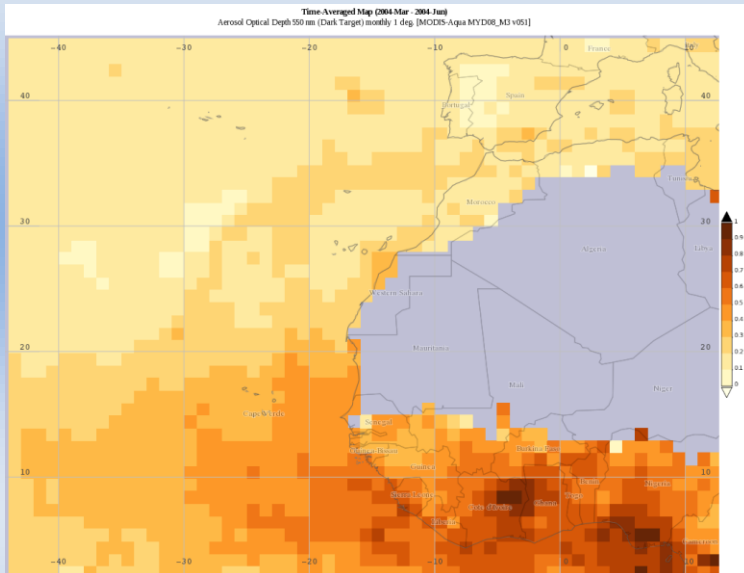
Sergei Sitnov

Aerosols over the Indo-Gangetic Basin from 2000 – 2012

Margaret M. Wonsick and Rachel T. Pinker

Smoothed & Unsmoothed:

Giovanni-4 shows the data both ways



The images at left show a comparison of the unsmoothed and smoothed data visualization options in Giovanni-4. The data shown are MODIS-Aqua Aerosol Optical Depth, averaged over the period March 2004 – June 2004, for the eastern tropical Atlantic Ocean. In the spring of each year, the transport of dust from the Sahara Desert increases due to dust storm outbreaks.

The default option is *unsmoothed* (top), which shows the actual size and distribution of the individual grid cells that compose the Level 3 mapped data provided by Giovanni. Giovanni-4 recently added the *smoothed* option (bottom), adapted from the Grid Analysis and Display System (GrADS). This option more closely resembles the default option in Giovanni-3.

The images shown are the PNG image download, which was also recently added to Giovanni-4.

Gaze Downward

Think Inward

Move Forward

<http://giovanni.gsfc.nasa.gov/>